

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of manufacturing an oxide thin film,
wherein a supercritical fluid is used as a medium.
2. (Original) A method of manufacturing a ferroelectric thin film,
wherein a mixture obtained by dissolving elements of oxide ferroelectric in a
supercritical fluid is used as a raw material.
3. (Original) A method of manufacturing a ferroelectric thin film,
wherein bubbles are dissolved in amorphous ferroelectric, and then the amorphous
ferroelectric is crystallized.
4. (Original) The method of manufacturing a ferroelectric thin film as defined in
claim 3,
wherein the bubbles are formed from supercritical fluid.
5. (Original) A method of manufacturing a ferroelectric thin film,
wherein a low-solubility element is dissolved in a supercritical fluid, and then the
dissolved product is added to a ferroelectric raw material.
6. (Original) A method of manufacturing a ferroelectric thin film,
wherein a supercritical fluid pressurized at a pressure ranging from a supercritical
pressure to four times the supercritical pressure is used as a solvent.
7. (Currently Amended) The method of manufacturing a ferroelectric thin film
as defined in ~~any one of claims 2, 3, 5 and 6,~~ claim 2,
wherein a ferroelectric thin film is selectively grown ~~only in a desired region by~~
utilizing difference in characteristics of a material of a previously-patterned substrate.

8. (Currently Amended) The method of manufacturing a ferroelectric thin film as defined in ~~any one of claims 2, 3, 5 and 6,~~ claim 2,

wherein a ferroelectric thin film is selectively grown ~~only in a desired region by~~ utilizing difference in surface energy of a previously-patterned substrate.

9. (Currently Amended) The method of manufacturing a ferroelectric thin film as defined in ~~any one of claims 2, 3, 5 and 6,~~ claim 2,

wherein a ferroelectric thin film is selectively grown ~~only in a desired region by~~ utilizing difference in surface state of a previously-patterned substrate.

10. (Currently Amended) The method of manufacturing a ferroelectric thin film as defined in ~~any one of claims 2, 3, 5 and 6,~~ claim 2,

wherein a ferroelectric thin film is formed only on an electrode metal.

11. (Original) A method of manufacturing a ferroelectric thin film, wherein a solvent obtained by dissolving a sol-gel solution including ferroelectric elements in a supercritical fluid is used.

12. (Original) A method of manufacturing a ferroelectric thin film, wherein a solution obtained by dissolving an oxide including ferroelectric elements in a supercritical fluid is used.

13. (Currently Amended) A method of manufacturing a ferroelectric thin film, wherein ~~a gas-liquid substance obtained~~ a substance in a gas-liquid phase obtained by dissolving an oxide including ferroelectric elements in a supercritical fluid is used.

14. (Original) A method of manufacturing a ferroelectric thin film, wherein a gas obtained by dissolving an oxide including ferroelectric elements in a supercritical fluid is used.

15. (Currently Amended) A method of manufacturing a ferroelectric thin film,

wherein one of H₂, N₂, Xe, CO₂, C₂H₆, CH₃OH₂, NH₃ and H₂O is used as the supercritical fluid as defined in ~~any one of claims 1, 2, 5 and 6 and 11 to 14.~~ claim 2.

16. (Currently Amended) A ferroelectric thin film which has a perovskite structure and is manufactured by the method as defined in ~~any one of claims 1 to 15.~~ claim 2.

17. (Currently Amended) A ferroelectric thin film which has a bismuth-layered structure and is manufactured by using the method as defined in ~~any one of claims 1 to 15.~~ claim 2.

18. (Currently Amended) A ferroelectric memory device comprising the ferroelectric thin film as defined in ~~claim 16 or 17.~~ claim 16.

19. (Currently Amended) A ferroelectric piezoelectric device comprising the ferroelectric thin film as defined in ~~claim 16 or 17.~~ claim 16.

20. (New) A ferroelectric memory device comprising the ferroelectric thin film as defined in claim 17.

21. (New) A ferroelectric piezoelectric device comprising the ferroelectric thin film as defined in claim 17.

Amendments to the Drawings:

The attached replacement drawing sheets make changes to Figs. 3 and 11 and replace the original sheets with Figs. 3 and 11.

Attachment: Replacement Sheets